

Zolpidem

This sheet is about exposure to zolpidem in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What is zolpidem?

Zolpidem is a sedative-hypnotic medication (causes calm and sleep) that has been used to treat insomnia (not being able to fall asleep or stay asleep). It belongs to a group of medications called hypnotic benzodiazepine receptor agonists, or HBRAs (sometimes called z-hypnotics or z-drugs). HBRAs are not benzodiazepines, but they work in a similar way. Some brand names of zolpidem are Ambien®, Edluar®, Intermezzo®, and Zolpimist®.

Sometimes when people find out they are pregnant, they think about changing how they take their medication, or stopping their medication altogether. However, it is important to talk with your healthcare providers before making any changes to how you take this medication. Some people who stop taking zolpidem suddenly may have withdrawal symptoms that can include fatigue, nausea, vomiting, flushing, lightheadedness, crying, and nervousness. Your healthcare providers can talk with you about this medication, the benefits of treating insomnia, and the risks of untreated insomnia during pregnancy.

I take zolpidem. Can it make it harder for me to get pregnant?

It is not known if zolpidem can make it harder to get pregnant.

Does taking zolpidem increase the chance for miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Studies have not been done to see if zolpidem increases the chance for miscarriage.

Does taking zolpidem increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Several studies have found that using zolpidem during pregnancy does not increase the chance for birth defects beyond the background risk.

Does taking zolpidem increase the chance of other pregnancy related problems?

Several studies have found that using zolpidem during pregnancy does not significantly increase the chance of other pregnancy related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth). Other studies have found that people who took zolpidem or other HBRAs during pregnancy were slightly more likely to deliver early or have smaller babies compared with people who did not take these medications during pregnancy. These studies could not fully account for other factors that can increase the chances of early delivery and babies that are born smaller than expected, such as the use of other medications, smoking, alcohol or drug use, the underlying medical conditions that the medications were being used to treat, and other factors.

I need to take zolpidem throughout my entire pregnancy. Will it cause withdrawal symptoms in my baby after birth? Some sedative medications can cause withdrawal symptoms in the newborn when they are used close to delivery. These symptoms in the newborn may include difficulty breathing, muscle weakness, irritability, crying, trouble sleeping, tremors, and jitteriness. It is not known if taking zolpidem close to delivery can also cause these symptoms in a newborn. It is important that your healthcare provider and your baby's healthcare providers know that you are taking zolpidem so that your baby can be monitored for these symptoms and get appropriate care if needed.



Will taking zolpidem in pregnancy affect future behavior or learning for the child?

A study found small effects on gross motor skills (large body movements such as running and jumping) and communication skills in children at age 5 years when zolpidem or other HBRA medications were used during late pregnancy. However, these effects were seen only when the medications were used to treat symptoms of depression or anxiety, not to treat insomnia. Factors related to the mother's underlying depression or anxiety could have been responsible for these effects.

Breastfeeding while taking zolpidem:

Zolpidem gets into breast milk in small amounts. One small study and a case report found that among 6 people who took zolpidem during the days after delivery, very little zolpidem was found in their breast milk three hours after taking the medication. No problems were reported in their babies. If you suspect the baby has any symptoms caused by zolpidem, such as sedation (being very sleepy), poor weight gain, low muscle tone (floppiness), or slowed breathing, contact the child's healthcare provider right away.

Taking a sleep aid might affect your ability to respond or care for your newborn during the day or at night. Talk to your healthcare provider about the best way to treat your insomnia as well as all of your breastfeeding questions.

If a male takes zolpidem, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

Studies have not been done to see if zolpidem could affect male fertility or increase the chance of birth defects. In general, exposures that fathers or sperm donors have are unlikely to increase the risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Selected References:

- Askew J. 2007. Zolpidem addiction in pregnant woman with a history of second trimester bleeding. Pharmacotherapy. 27(2):306-308.
- Huitfeldt A, et al. 2020. Associations of maternal use of benzodiazepines or benzodiazepine-like hypnotics during pregnancy with immediate pregnancy outcomes in Norway. JAMA Netw Open. Jun 1;3(6):e205860.
- Grigoriadis S, et al. 2022. Hypnotic benzodiazepine receptor agonist exposure during pregnancy and the risk of congenital malformations and other adverse pregnancy outcomes: a systematic review and meta-analysis. Acta Psychiatr Scand. 146(4):312-324.
- Juric S, et al. 2009. Zolpidem in pregnancy: placental passage and outcome. Arch Womens Ment Health. 12:441-446
- Lupattelli A, et al. 2019. Association of maternal use of benzodiazepines and z-hypnotics during pregnancy with motor and communication skills and attention-deficit/hyperactivity disorder symptoms in preschoolers. JAMA Netw Open. Apr 5;2(4):e191435.
- Pons G, et al. 1989. Zolpidem excretion in breast milk. Eur J Clin Pharmacol. 37:245-248.
- Reichner C. 2015. Insomnia and sleep deficiency in pregnancy. Obstetric Medicine. Dec;8(4):168-71.
- Saito J, et al. 2022. Presence of hypnotics in the cord blood and breast milk, with no adverse effects in the infant: a case report. Breastfeeding Med 17(4):349-352.
- Wang LH, et al. 2010. Increased risk of adverse pregnancy outcomes in women receiving zolpidem during pregnancy. Clinical Pharmacology and Therapeutics. 88(3):369-374.
- Wikner BN, Kallen B. 2011. Are hypnotic benzodiazepine receptor agonists teratogenic in humans? Journal of Clinical Psychopharmacology. 31(3):356-359.